



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

February 22, 2008

Northwest Regional Office
8315 Virginia Street, Suite 1
Merrillville, Indiana 46410
(219) 757-0265
(888) 209-8892 Toll Free
(219) 757-0267 FAX
www.IN.gov/idem

-VIA CERTIFIED MAIL 7002 0510 0004 0402 3826

Kenneth L. Mentzel
U. S. Steel, Gary Works
1 North Broadway
Gary, IN 46402

RE: Referral to the Office of Enforcement
U.S. Steel, Gary Works
Plant ID Number: 089-00121
Gary, Lake County

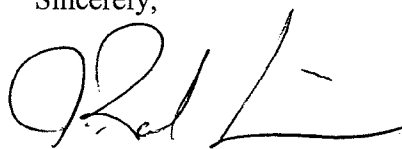
Dear Mr. Mentzel:

The Fourth (4th) Quarter 2007 Reports (October 1, 2007 through December 31, 2007) submitted by you on January 28, 2008, identified the following deviations:

- (1) Permit Condition D.2.4(a), D.2.5(e): On October 19, 2007 the allowable visible emissions for coke oven door (10%) was exceeded (11.03%) during a Method 303 inspection of No. 5 Coke Battery
- (2) Permit Condition D.2.4(c)(2): On November 18, 2007 the allowable visible emissions for coke oven pushes (20% opacity) was exceeded (30.0%) during compliance monitoring on No. 5 Coke Battery.
- (3) Permit Condition C.1(a): On November 14, 2007 the (20%) opacity six (6) minute average opacity limit was exceeded (35.0% and 29.6%) during compliance monitoring at No. 4 Blast Furnace.
- (4) Permit Condition C.1(a): On October 03, 2007 the (20%) opacity six (6) minute average opacity limit was exceeded (22.9%) during compliance monitoring at No. 8 Blast Furnace.
- (5) Permit Condition C.1(a): On October 23, 2007 the (20%) opacity six (6) minute average opacity limit was exceeded (40.6%) during compliance monitoring at No. 8 Blast Furnace.
- (6) Permit Condition D.8.4(b) and D.8.15: On October 15, 2007 the allowable roof monitor visible emissions from No.1 BOF Shop (20% opacity 3 minute average) was exceeded (24.2%) during compliance monitoring.

This matter has been referred to IDEM's Office of Enforcement for appropriate action. If formal action is initiated, you will be issued a notice of violation informing you of how to proceed in resolving this matter. Please direct any response to this letter and any questions to Dave Sampias at 219/757-0291.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Robert Simmons", with a stylized flourish at the end.

J. Robert Simmons
Deputy Director
Northwest Regional Office

JRS/dcs
ACES No. 87097
cc: Office of Enforcement
File

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

PART 70 OPERATING PERMIT CERTIFICATION

Source Name: U. S. Steel – Gary Works
Source Address: One North Broadway, Gary, Indiana 46402
Mailing Address: One North Broadway, Gary, Indiana 46402
Part 70 Permit No.: T089-7663-00121
Reporting Period: October 1, 2007 to December 31, 2007

This certification shall be included when submitting monitoring, testing report/results or other documents as required by this approval.

Please check what document is being certified:

- Test Result (specify)
- ☒ Reports (specify) Quarterly Deviation and Compliance Monitoring Report for Iron Producing
Quarterly Deviation and Compliance Monitoring Report for Steel Producing North
Quarterly Deviation and Compliance Monitoring Report for Steel Producing South
Quarterly Deviation and Compliance Monitoring Report for Coke Plant
No. 2 Precarbon Facility Compliance Monitoring
Coke Battery Nos. 2, 5 and 7 Underfiring COMS Excess Emissions
Coke Battery Nos. 2, 5 and 7 Underfiring Opacity Monitor Performance Audit
Coke Battery Nos. 2, 5 and 7 Underfiring NG Injection Jets Natural Gas Usage Rates
Semiannual Byproducts NESHAP Report (40 CFR 61, Subpart L and Subpart V)
Semiannual Battery NESHAP Report (40 CFR 63, Subpart L)
Coke Plant Boiler House Nos. 1 through 10 Boilers Natural Gas Usage Rates
Coke Plant Boiler House Nos. 1 through 10 Boilers NOx Emissions
No. 3 Sinter Plant Recirculating Burners Natural Gas Usage Rates
No. 3 Sinter Plant Recirculating Burners Coke Oven Gas Usage Rates
No. 3 Sinter Plant CEMS Excess Emissions
South Sheet Mill Hydrogen Annealing Furnaces Natural Gas Usage Rates
Turboblower Boiler House Boiler No. 6 Natural Gas Usage Rate
- Notification (specify)
- Other (specify)

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

MS Williams

Printed Name: Michael S. Williams

Title/Position: General Manager

Date:

1-24-08

US Steel-Gary Works
 Gary, Indiana
 Permit Reviewer: Gail McGarrity

T089-7663-00121

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
 QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: U.S. Steel – Gary Works
 Source Address: One North Broadway, Gary, Indiana 46402
 Mailing Address: One North Broadway, Gary, Indiana 46402
 Part 70 Permit No.: T089-7663-00121

Months: October 1 to December 31 Year: 2007

Page 1 of 2

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

☒ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.

Permit Requirement (specify permit condition #) C.1(a), D.7.16

Date of Deviation: 10/03/07

Duration of Deviation: 6 minutes

Number of Deviations: 1

Probable Cause of Deviation: Clay fell out of the back of the mud gun and entered the iron trough.

Response Steps Taken: Revised procedures on properly loading and cleaning the mud gun.

Permit Requirement (specify permit condition #) C.1(a), D.7.16

Date of Deviation: 10/23/07

Duration of Deviation: 6 minutes

Number of Deviations: 1

Probable Cause of Deviation: Sleeve was not installed over the mud gun nozzle allowing clay to leak into the trough.

Response Steps Taken: Review of proper operating procedure with Keepers and Helpers.

US Steel-Gary Works
Gary, Indiana
Permit Reviewer: Gail McGarrity

T089-7663-00121

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Permit Requirement (specify permit condition #) C.1(a), D.7.16	
Date of Deviation: 11/14/07	Duration of Deviation: 6 minutes
Number of Deviations: 2	
Probable Cause of Deviation: Tilter spout and bowl areas openings.	
Response Steps Taken: Instructed employees to utilize blankets of k-wool over spout and bowl area openings.	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: Gary Levanduski

Title/Position: Division Manager, Iron Producing

Date: January 21, 2008

Phone: 219.888.4688

Attached a signed certification to complete this report

US Steel-Gary Works
Gary, Indiana
Permit Reviewer: Gail McGarrity

T089-7663-00121

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

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Part 70 Permit No.: T089-7663-00121

Months: October 1 to December 31 Year: 2007

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☒ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.

Permit Requirement (specify permit condition #):

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Form Completed By: Casey C. Carrabine
Title/Position: Division Manager, Steel Producing North
Date: January 21, 2008
Phone: 219.888.4803

Attach a signed certification to complete this report.

US Steel-Gary Works
Gary, Indiana
Permit Reviewer: Gail McGarrity

T089-7663-00121

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

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Part 70 Permit No.: T089-7663-00121

Months: October 1 to December 31 **Year:** 2007

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<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input checked="" type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
Permit Requirement (specify permit condition #) D.8.4(b), D.8.15	
Date of Deviation: 10/15/07	Duration of Deviation: 3 Minutes
Number of Deviations: 1	
Probable Cause of Deviation: Possibility of wind within shop carried particulate to roof monitor.	
Response Steps Taken: Checked gas cleaner draft of furnaces through visual observation.	

Form Completed By: Robert H. Lange
Title/Position: Division Manager, Steel Producing South
Date: January 21, 2008
Phone: 219.888.7435

Attach a signed certification to complete this report.

US Steel-Gary Works
 Gary, Indiana
 Permit Reviewer: Gail McGarrity

T089-7663-00121

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
 QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

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Page 1 of 2

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☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

☒ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.

Permit Requirement (specify permit condition #) D.2.4(a), D.2.5(e)

Date of Deviation: 10/19/2007

Duration of Deviation: Not applicable

Number of Deviations: 1

Probable Cause of Deviation: 15 door leaks out of 136 observed.

Response Steps Taken: Sealed leaks on the leaking doors.

Permit Requirement (specify permit condition #) D.2.4(c)(2)

Date of Deviation: 11/18/2007

Duration of Deviation: Not applicable

Number of Deviations: 1

Probable Cause of Deviation: Possible green heat.

Response Steps Taken: Discussed minimizing green heats procedure.

US Steel-Gary Works
Gary, Indiana
Permit Reviewer: Gail McGarrity

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Permit Requirement (specify permit condition #) C.1 (b) and D.2.5 (i)	
Date of Deviation: 12/18/2007	Duration of Deviation: 15 minutes
Number of Deviations: 1	
Probable Cause of Deviation: Holes in oven No. 60 wall and decarbonizing pipe behind oven No. 24.	
Response Steps Taken: Turned off gas to Oven No. 60 walls and sealed hole in decarbonizing pipe.	
Permit Requirement (specify permit condition #) C.1 (a) and D.2.5(i) (See Attachment 1)	
Date of Deviation:	Duration of Deviation: Not applicable
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: Lawrence W. Sutherland

Title/Position: Division Manager, Coke Operations

Date: January 21, 2008

Phone: 219.888.4028

Attach a signed certification to complete this report.

Attachment 1

U.S. Steel - Gary Works
Part 70 Permit No.: T089-7663-00121

Permit Requirement: C.1(a) and D.2.5(i)

Battery No. 2

Dates of Deviation:	10/01/2007 - 12/31/07
Duration of Deviation:	6 minutes/deviation
No. of Deviations:	397
Probable Cause of Deviation:	Condition of oven walls
Response Steps Taken:	Lower mushroom in air box to to reduce particulates to stack.


Battery No. 5

Dates of Deviation:	10/01/2007 - 12/31/07
Duration of Deviation:	6 minutes/deviation
No. of Deviations:	1554
Probable Cause of Deviation:	Condition of oven walls
Response Steps Taken:	Lower mushroom in air box to to reduce particulates to stack.

Battery No. 7

Dates of Deviation:	10/01/2007 - 12/31/07
Duration of Deviation:	6 minutes/deviation
No. of Deviations:	1099
Probable Cause of Deviation:	Condition of oven walls
Response Steps Taken:	Lower mushroom in air box to to reduce particulates to stack.

STATUS: APPROVED[Return Main](#)[Previous](#)[Next](#)

Insp Number:	4681	Insp Date:	10/15/2007
Insp Class:	Self Monitoring	Inspector:	SIMPSON, JON
Insp Plant:	Gary Works		
Monitor Point:	No. 1050 Shop Roof Monitor		
Duration:	2 Hr		

SOURCE LAYOUTS[Edit SourceLayout](#)

Acknowledgements			
Name	Sign Off	Phone	Comments
MANGAHAS, MICHAEL		x 4116	
REYES, MAYELLA	Y	x7850	Comments Submit

[Acknowledge Users..](#)

CONDITIONS

<< 1 OF 1 >> [Create New Condition](#) [Save Conditions](#) [Update Conditions](#) [Delete](#)

Date & Time:	10/15/2007 7:00:00 AM		
Background Color:	sky	Sky Conditions:	Partly Cloudy
Wind Speed:	7	Wind Direction:	SOUTH EAST
Ambeint Temp:	57	Relative Humidity	82
Wet Bulb Temp:		Plume Type:	Attached

OBSERVATION POINTS

(Choose from Available Observation Points to Add to List; Select Obs. Point from list to enable Deletion)

Available Points:	None Selected
Minute:	0
Add	Delete

List of Selected Observation Points:

0 SP1 Primary Location - Substation 108

Method Limit
20% over 3 Min

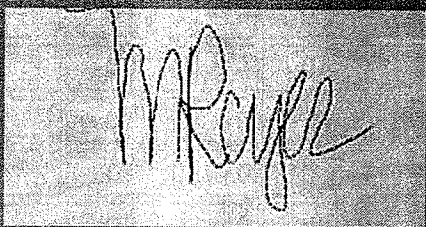
Limit Type and Color

И. Б. Б.

10/23/2007

[illegible]

STATUS: APPROVED[Return Main](#)[Previous](#)[Next](#)

Insp Number:	4/50	Insp Date:	10/23/2007
Insp Class:	Self Monitoring	Inspector:	MCCLURE, DANIEL
Insp Plant:	Gary Works		
Monitor Point:	No. 8 BF Easthouse Roof Monitor		
Duration:	2 Hr		

SOURCE LAYOUTS[Edit SourceLayout](#)

Acknowledgements			
Name	Sign Off	Phone	Comments
MANGAHAS, MICHAEL		x 4116	
REYES, MAYELLA	Y	x7850	Comments

[Submit](#)

[Acknowledge Users..](#)

CONDITIONS

[<<](#)
1 OF 1
[>>](#)
[Create New Condition](#)
[Save Conditions](#)
[Update Conditions](#)
[Delete](#)

Date & Time:	10/23/2007 12:15:00 PM		
Background Color:	gray	Sky Conditions:	Partly Cloudy
Wind Speed:	8	Wind Direction:	NORTH
Ambient Temp:	50	Relative Humidity	91
Wet Bulb Temp:		Plume Type:	Attached

OBSERVATION POINTS

(Choose from Available Observation Points to Add to List; Select Obs. Point from list to enable Deletion)

Available Points:	None Selected
Minute:	0
Add	Delete

List of Selected Observation Points:

0 8BFC1 - E of slip and road, 10 yards S of support structure for Sinter cross over

Method Limit
20% over 6 Min

Limit Type and Color


248 BF 10/3/2007

0		0	0	0	0	
0	12:49	0	0	0	0	
0	12:50	0	0	0	0	
0	12:51	0	0	0	0	
0	12:52	0	0	0	0	
0	12:53	0	0	0	0	
0	12:54	0	0	0	0	
0	12:55	0	0	0	0	
0	12:56	0	0	0	0	
0	12:57	0	0	0	0	
0	12:58	0	0	0	0	
0	12:59	0	0	0	0	
0	1:00	0	0	0	0	
0	1:01	0	0	0	0	
0	1:02	0	0	0		
0	1:03					↑
0	1:04					22.9%
0	1:05					
0	1:06					
0	1:07					
0	1:08				10	↓
0	1:09	10	10	10	0	
0	1:10	0	0	0	0	
0	1:11	0	0	0	0	
0	1:12	0	0	0	0	
0	1:13	0	0	0	0	
0	1:14	0	0	0	0	

STATUS: APPROVED

[Return Main](#)[Previous](#)[Next](#)☐

Insp Number:	4810	Insp Date:	10/3/2007
Insp Class:	Sinter Processing	Inspector:	SMITH, THOMAS
Insp Plant:	epi 1000s		
Monitor Point:	0811B Sinterhouse Roof Monitor		
Duration:	2 Hr		



SOURCE LAYOUTS

[Edit SourceLayout](#)

Acknowledgements			
Name	Sign Off	Phone	Comments
MANGAHAS, MICHAEL		x 4116	
REYES, MAYELLA	Y	x7850	Comments

[Submit](#)

[Acknowledge Users..](#)

CONDITIONS

<<

1 OF 1

>>

[Create New Condition](#)[Save Conditions](#)[Update Conditions](#)[Delete](#)

Date & Time:	10/3/2007 11:15:00 AM		
Background Color:	sky	Sky Conditions:	Party Cloudy
Wind Speed:	5	Wind Direction:	NORTH WEST
Ambient Temp:	65	Relative Humidity	88
Wet Bulb Temp:		Plume Type:	Attached

OBSERVATION POINTS

(Choose from Available Observation Points to Add to List; Select Obs. Point from list to enable Deletion)

Available Points:	None Selected
Minute:	0
Add	Delete

List of Selected Observation Points:

0 8BFC2 - E of slip and road under support structure for Sinter cross over

Method Limit
20% over 6 Min

Limit Type and Color

I4 BF 11/14/2007

0						BLK BRN	A
0						BLK BRN	
0						BLK BRN	29.6%
0		50	40	30	20	BLK BRN	
0		20	20	10	20	BLK BRN	L
0		20	10	10	10	BLK BRN	
0		10	10	10	10	BLK BRN	
0		10	5	5	10	BLK BRN	
0		5	5	5	5	BLK BRN	
0		5	5	5	5	BLK BRN	
0		0	0	0	0		
0		0	0	0	0		
0		0	0	0	0		
0		0	0	0	0		
0		0	0	0	0		
0		0	0	0	0		
0		0	0	0	0		
0		0	0	0	0		
0		0	0	0	0		
0		0	0	0	0		
0		0	0	0	0		
0		0	0	0	0		
0		10	10	10	10	BLK -BN	
0		0	0	0	0		
0		5	5	0	0	BLN - BN	
0		5	0	0	0	BLK - BN	
0		0	0	0	0		
0		60	10	5	0	BLACK - Plug	
0		0	0	0	0	End Cast	
0		0	0	0	0		
0		0	0	0	0		
0		0	0	0	0		
0		0	0	0	0		
0		0	0	0	0		
0		0	0	0	0		

13% over 6 Min

4 BF
11/14/2007

13.5% - USS INTERNAL AUDIT

READINGS / OBSERVATIONS

Save Readings

Add New Session

View Exceedances

Session 0 Start Time: Hour 9 Minute: 20 AM/PM AM

Session 0 Comments:

Session	Time	:00	:15	:30	:45	Reading Comments (Minute)
0		0	0	0	0	Begin Observation
0	9:20	0	0	0	0	Cast # 146 in progress
0	9:21	0	0	0	0	
0	9:22	0	0	0	0	
0	9:23	0	0	0	0	
0	9:24	0	0	0	0	
0	9:25	0	0	0	0	
0	9:26	0	0	0	0	
0	9:27	0	0	0	0	
0	9:28	0	0	0	0	
0	9:29	0	0	0	0	
0	9:30	0	0	0	0	
0	9:31	0	0	0	0	
0	9:32	0	0	0	0	
0	9:33	0	0	0	0	
0	9:34	0	0	0	0	
0	9:35	0	0	0	0	
0	9:36	0	0	0	0	
0	9:37					
0	9:38					
0	9:39					BLK BRN ↑
0	9:40					BLK BRN 35.0 0/0
0	9:41					BLK BRN
0	9:42					BLK BRN
0	9:43					BLK BRN
0	9:44					BLK BRN
0	9:45					BLK BRN
0	9:46					BLK BRN